

SUGGESTED SOLUTION :

The entire air distribution system associated with the theater (RTU-1) needs to be analyzed and corrected to assure that adequate temperature and air flow conditions are maintained.

However, prior to undertaking such effort which is expected to entail major disruption in services, extensive scaffolding to access ceilings, coordination and approval with historic preservation specialists to assure that the historic fabric of the facility is maintained and overall a very significant effort due to the nature and physical restraints of the project, it is crucial to establish, document, and analyze the current operating limitations of the systems at hand prior to proceeding with any modifications of the air distribution system.

STEP 1:

The following actions are suggested as a prelude to the permanent corrective actions:

1. Develop drawings showing the complete air distribution system. The 2007 renovation drawings only show portions of the systems at hand. Depiction of the entire system is critical, especially for the corrective action to follow.
2. Commission the 2007 renovation AHUs serving the theater and front of the house. Our brief analysis indicates that equipment heating/cooling capacities are more than adequate for the intended use. However, operation sequences and temperature controls are unknown at this time due to the lack of record information.

During our visit, we found the theater AHU at what we would expect to be an unoccupied cycle (throttled airflow, O.A. dampers closed) with the fan frequency drive displays indicating 75% loading of the fan motors. This value may either be excessive depending on how the AHU was designed to be controlled, or excessive pressure drop across the silencers and/or excessive drop through portions of the duct system are encountered, to identify several possible causes. Therefore, we suggest locating all available documentation (control diagrams, specifications, shop drawings) and proceed with a complete commissioning to identify any underlying problems and establish a base for the corrections to follow.

3. Upon completing the commissioning of the AHUs and verifying proper operating conditions, the unit needs to be indexed to its design air flow capacity and a complete air balancing of all associated air terminals needs to be conducted in conjunction with a duct pressure profile.

The suggested air balancing will identify the current airflow, or lack of, at each of the air terminals. This will allow the design team to pinpoint and strategically select where ceilings, walls, etc must be open in order to conduct the required air distribution modifications.

STEP 2:

Upon completion of the previous tasks, perform an engineering analysis to determine the minimum extent of demolition and disturbance to the building historic fabric.

Anticipated permanent correct actions include:

1. Consider replacing the supply air decorative grilles with supply air diffusers able of achieving the desired air throw and patterns. The replacement must remain sensitive to the historic fabric of the facility, so consultation with the appropriate specialists is mandatory.
2. Depending on the TAB results, analyze and determine whether the sound silencers need to be replaced with more appropriate units.

3. Eliminate the eight supply air grilles from the back of the balcony.
4. Remove the rear wall of the return air shafts by the stage and install a duct liner so the entire return air flow amount is extracted from the floor level. Opening the shaft from the back (balcony side) is suggested so as to avoid damage to the ornamental plaster on the front walls.
5. Install new return air grilles to the back of the house. Consider utilizing multiple ducted returns in the void underneath the balcony bleachers. Some destructive testing will be required to determine whether and how much space is available.

Access to the void underneath the balcony seating will be by removing the ceilings outside the front entrances to the theater.

6. Depending on the results of the air balancing report, remove and replace portions of the existing ductwork if no other, less destructive, options are available.
7. Perform an analysis to determine based on the results of the preliminary TAB report and the degree of application of the previously suggested actions, whether a supplementary heating system is beneficial. It is our belief that merely adding a supplemental heating system without addressing the current inadequate air distribution patterns may create more problems at the balcony level than expected to solve. Furthermore, as indicated previously, we believe that the AHU possesses adequate heating capacity to overcome the heating requirement of the space, if proper air distribution is achieved.
8. Vacuum clean existing to remain ductwork.
9. Perform a final air balancing incorporating all corrections, adjustments, and modifications.

The estimated construction costs associated with work under Step 2 are to be viewed as allowances as the scope of work can not be specifically defined until the work associated with Step 1 is completed.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Vestibule Heating

DEFICIENCY NUMBER: H-2

ESTIMATED COST: \$57,400
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Each of the two vestibules is heated and cooled by a 36 x 4 ceiling grille. Location and size of the grille is not deemed adequate to heat the vestibule.

PHOTOGRAPHIC DOCUMENTATION :



Pic 1 – Supply Air Grille

SUGGESTED SOLUTION :

The least disruptive solution is to add supplemental heat to each of the vestibules in the form of a strip electric baseboard.

Electricity is envisioned as the necessary choice for heating source as the facility's entire heating is achieved through gas-fired packaged roof-top AHUs.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Commission / Air Balance Foyer AHU (RTU-2)

DEFICIENCY NUMBER: H-3

ESTIMATED COST:

STEP 1: \$68,100

STEP 2: \$98,600

SEE APPENDIX B

DEFICIENCY DESCRIPTION:

The 2007 renovation replaced the foyer AHU with a DX packaged gas-fired rooftop AHU (RTU-2). The design documents (12/29/06) neither indicate the existing air distribution system nor indicate an air balance to be conducted to assure proper airflow to the various air terminals.

Furthermore, the type of supply grilles used do not offer the devices require to achieve proper air throws and room coverage. The result is minimal coverage in the immediate vicinity of the grille with all the heat rising to the ceiling level.

PHOTOGRAPHIC DOCUMENTATION :

Pic 1- Foyer Supply Grille



Pic 2- Foyer Supply Grille

SUGGESTED SOLUTION :

Following the same logic as in deficiency H-1, it is suggested to:

STEP 1:

1. Develop drawings to show the complete duct distribution inclusive of the newly replaced RTU-2.
2. Commission RTU-2 to assure it operates at its design capacity.
3. Perform a preliminary air balancing report to establish degree of effectiveness of delivery air to the areas served.
4. Analyze results and determine degree of modifications based on the documented air measurements

STEP 2:

1. At a minimum, consider replacing the two wall supply grilles with air terminals able of greater air throw.
2. Vacuum clean existing to remain ductwork.
3. Air balance entire system

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Main Electrical Room In-Line Supply Air Fan

DEFICIENCY NUMBER: H-4

ESTIMATED COST: \$3,600
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

In-line supply air fan serving main electrical room not working.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

Repair or replace with new in-line supply air fan.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Gas Meter Room Exhaust Air Fan

DEFICIENCY NUMBER: H-5

ESTIMATED COST: \$2,700
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

In-line exhaust air fan serving gas meter room is not working.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

The exhaust air fan has exceeded its useful life and shows severe deterioration. Replace with new in-line exhaust air fan.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Dressing Room and Toilet Exhaust Air Fan

DEFICIENCY NUMBER: H-6

ESTIMATED COST: \$7,500
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Centrifugal utility exhaust air fan located on dressing room roof (low roof) serving bathroom and dressing room is in poor condition.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

The exhaust air fan has exceeded its useful life and shows severe deterioration. Replace existing exhaust air fan with new and balance entire system.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Stage Exhaust Air Fan

DEFICIENCY NUMBER: H-7

ESTIMATED COST: \$7,600
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Centrifugal utility exhaust air fan located on stage roof is in poor condition.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

The exhaust air fan has exceeded its useful life and shows sever deterioration. Replace existing exhaust air fan with new and balance entire system.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Projector Room Exhaust Air Fan

DEFICIENCY NUMBER: H-8

ESTIMATED COST: \$4,900
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

The exhaust air fan serving projector room and ductwork is in poor condition.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

Repair/replace exhaust air fan with new. Modify ductwork as needed and balance to design air quantity.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Projector Room Supply Air

DEFICIENCY NUMBER: H-9

ESTIMATED COST: \$1,400
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Supply air ductwork serving projector room in need of top register and volume damper.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

The supply air ductwork serving projector room is missing top register. Supply air duct shall be extended and provided with volume damper and register.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Exhaust Wall Cap**DEFICIENCY NUMBER:** H-10**ESTIMATED COST:** \$100
SEE APPENDIX B**DEFICIENCY DESCRIPTION:**

The exhaust wall cap protecting the in-line exhaust air fan outlet on west wall is missing.

PHOTOGRAPHIC DOCUMENTATION :

SUGGESTED SOLUTION :

Provide wall cap to protect duct/fan from weather.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Clean Duct and Air Terminals (AHU-3)

DEFICIENCY NUMBER: H-11

ESTIMATED COST: \$7,200
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Wall registers, ceiling diffusers, and grilles show excessive accumulation of dust/debris. It is expected that similar conditions exist inside the ductwork.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

Vacuum clean ducts and air terminals.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Centrifugal Utility Exhaust Fan

LOCATION : On Dressing Room Roof (Low Roof)

ROOMS SERVED : Bathroom and Dressing Room

EQUIPMENT CONDITION CODE: Red

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Missing

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Poor condition

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS : See deficiency number H-6

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Centrifugal Utility Exhaust Fan

LOCATION : On Stage Roof

ROOMS SERVED : Stage

EQUIPMENT CONDITION CODE: Red

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Unknown

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Poor condition

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS : See deficiency number H-7

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Air Cooled Condenser (CU-1)

LOCATION : On Stage Roof

ROOMS SERVED : Serving RTU-1

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Carrier / 38AH-104-621JA

SERIAL NUMBER : 5007Q09046

AGE (YRS) : 5 years (2007)

TYP. USEFUL LIFE (YRS) : 5 years

NOMINAL TONNAGE : 100 Tons (1220 MBH)

CONDENSER DATA : 6 Fan with 1 HP each

COMPRESSOR DATA : Semi-Herm with 6/1 HP each

REFRIGERANT : R-22

CONTROLS : Electronic

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Air Cooled Condenser (CU-2)

LOCATION : On House Roof

ROOMS SERVED : Serving Evaporator in Projection Room

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Carrier / 38QRFORF018-301

SERIAL NUMBER : 3307X91350

AGE (YRS) : 5 years (2007)

TYP. USEFUL LIFE (YRS) : 5 years

NOMINAL TONNAGE :

CONDENSER DATA :

COMPRESSOR DATA :

REFRIGERANT :

CONTROLS : Electronic

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Air Cooled Condenser (CU-3)

LOCATION : On House Roof

ROOMS SERVED : Serving Evaporator in Projection Room

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Carrier / 38QRFORF018-301

SERIAL NUMBER : 3307X91347

AGE (YRS) : 5 years (2007)

TYP. USEFUL LIFE (YRS) : 5 years

NOMINAL TONNAGE :

CONDENSER DATA :

COMPRESSOR DATA :

REFRIGERANT :

CONTROLS : Electronic

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Exhaust Fan

LOCATION : Unknown

ROOMS SERVED : Projector Room

EQUIPMENT CONDITION CODE:

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Unknown

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Unknown

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS : See deficiency number H-8

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : In-Line Exhaust Fan

LOCATION : Basement Level

ROOMS SERVED : Hot Water Heater Room

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Cook / 905QN12D

SERIAL NUMBER : 105S963286

AGE (YRS) : 5 years (2007)

TYP. USEFUL LIFE (YRS) : 5 years

CASING : Galvanized

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Electronic

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : In-Line Exhaust Fan

LOCATION : Basement Level

ROOMS SERVED : Main Electrical Room

EQUIPMENT CONDITION CODE: Red

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Plate is missing

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Marginal condition

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS : See deficiency number H-4

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : In-Line Exhaust Fan

LOCATION : Basement Level

ROOMS SERVED : Gas Meter Room

EQUIPMENT CONDITION CODE: Red

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Unknown

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Poor condition

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS : See deficiency number H-5

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : In-Line Exhaust Fan

LOCATION : In First Floor Ceiling

ROOMS SERVED : First Floor Men's and Women's Bathrooms

EQUIPMENT CONDITION CODE: Unknown

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Unknown

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Unknown

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : In-Line Exhaust Fan

LOCATION : In First Floor Ceiling

ROOMS SERVED : West Side Bathroom

EQUIPMENT CONDITION CODE: Unknown

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Unknown

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Unknown

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS : See deficiency number H-10

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Power Roof Exhaust Fan

LOCATION : On House Roof

ROOMS SERVED : Mezzanine Men's and Women's Bathrooms

EQUIPMENT CONDITION CODE: Yellow

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Unknown

SERIAL NUMBER : Unknown

AGE (YRS) : Unknown

TYP. USEFUL LIFE (YRS) : Unknown

CASING : Marginal condition

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS : Unknown

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Rooftop Unit (RTU-1)
LOCATION : On Stage Roof
ROOMS SERVED : Balcony Level and House

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : HuntAir/Custom

SERIAL NUMBER : Factory Assembled Custom Built

AGE (YRS) : 5 years (2007)

TYP. USEFUL LIFE (YRS) : 5 years

CASING : 2" thick double wall galvanized

GAS HEATING : Gas fire with 1500/1200 MBH input/output

COOLING COIL : DX cooling with 1243 MBH cap

FILTER : Throwaway 30% Efficiency

CONTROLS : Electronic

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Rooftop Unit (RTU-2)

LOCATION : On Stage Roof

ROOMS SERVED : First Floor Foyer & Mezzanine Second Floor

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Carrier / 48AJS030ACQ511GN

SERIAL NUMBER : 5207U38512

AGE (YRS) : 5 years (2007)

TYP. USEFUL LIFE (YRS) : 5 years

CASING : Double wall galvanized

GAS HEATING : Gas fire with 350/287 MBH input/output

COOLING COIL : DX cooling with 339.2 MBH cap

FILTER : Throwaway 30% Efficiency

CONTROLS : Electronic

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Rooftop Unit (RTU-3)
LOCATION : On Dressing Room Roof (Low Roof)
ROOMS SERVED : Stage and Dressing Room

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Carrier / 48AJS035ADQ511HP

SERIAL NUMBER : 5207U38515

AGE (YRS) : 5 years (2007)

TYP. USEFUL LIFE (YRS) : 5 years

CASING : Double wall galvanized

GAS HEATING : Gas fire with 350/287 MBH input/output

COOLING COIL : DX cooling with 398.27 MBH cap

FILTER : Throwaway 30% Efficiency

CONTROLS : Electronic

REMARKS :

8. PLUMBING

8. PLUMBING

The buildings plumbing systems and equipment appear to vary in age with the most recent improvements with the domestic water heaters occurring in 2007. Prior to the 2007 renovation a renovation took place in 1992 that included all of the major plumbing systems in the building. Plumbing systems included in the building are as follows: A sanitary waste system consisting of a duplex sewage ejector and an 8" building drain. A domestic water supply system with a 4" feed to the building. Storm drainage system consisting of roof drains with internal rain leaders and several duplex sump pumps and submersible sump pumps. A natural gas supply system that feeds the domestic water heaters and the buildings HVAC equipment.

Observations/Comments:

1. Building sanitary/waste: Although not operational tested the duplex sewage ejector pump did not appear operational. During the walk through these pumps were indicating a high water alarm and upon operation of some of the buildings plumbing fixtures sewage was flowing out from the sewage ejector pit as well as the floor drains located in room 056.
2. Building storm drain system: Although not operationally tested, all of the existing duplex sump pumps, total of 5, were observed to be in marginal condition and approaching their expected life expectancy.
3. Building storm drain system: Although not operationally tested, the existing duplex dewatering sump pump was observed to be in marginal condition and approaching its expected life expectancy. Additionally the system was indicating a high water alarm and was not operating during the walk building inspection.
4. Plumbing Fixtures: The existing plumbing fixtures were in marginal condition. A leak in the waste trap on the mezzanine level snack bar was observed. The existing showerheads were either missing or were

flow restricted due to corrosion. The existing lavatory faucets are manual operated with high flow or missing aerators.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Sanitary Drain/Sewage Ejector (SE-1)

DEFICIENCY NUMBER: P-1

ESTIMATED COST: \$18,300

DEFICIENCY DESCRIPTION: Malfunctioning sewage ejector producing sanitary overflow from basement floor drains.

PHOTOGRAPHIC DOCUMENTATION :



Existing Duplex Sewage Ejector Pump Located in Basement Room 056

SUGGESTED SOLUTION : During the investigation of this issue the building sewage ejector was not operating and was indicating a high water alarm. Replace existing duplex sewage ejector, control panel and basin cover. Inspect sump pit basin for damage and replace if necessary.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Duplex Sump Pump (DP-1)

DEFICIENCY NUMBER: P-2

ESTIMATED COST: \$16,200

DEFICIENCY DESCRIPTION: Aged duplex sump pump system

PHOTOGRAPHIC DOCUMENTATION :



Duplex Sump Pump (DP-1) located under stair 064



Access cover to duplex sump pump located under stair 064

SUGGESTED SOLUTION :

Due to age it is recommend to replace existing duplex sump pump (DP-1), controls and basin cover.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Duplex Sump Pump (DP-2)

DEFICIENCY NUMBER: P-3

ESTIMATED COST: \$17,200

DEFICIENCY DESCRIPTION: Aged duplex sump pump system.

PHOTOGRAPHIC DOCUMENTATION :



Duplex Sump Pump (DP-2) located in basement corridor



Duplex Sump Pump (DP-2) Control Panel

SUGGESTED SOLUTION :

Due to age, recommendation is to replace existing duplex sump pump (DP-2), controls and basin cover.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Duplex Sump Pump (DP-3)

DEFICIENCY NUMBER: P-4

ESTIMATED COST: \$16,200

DEFICIENCY DESCRIPTION: Aged duplex sump pump equipment.

PHOTOGRAPHIC DOCUMENTATION: No photo available. This equipment is located below stair 053 behind a fire rated access cover. The access cover was sealed shut to prevent access for inspection.

SUGGESTED SOLUTION:

Due to age it is recommended to replace existing duplex sump pump (DP-3), controls and basin cover.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Duplex Sump Pump (DP-4)

DEFICIENCY NUMBER: P-5

ESTIMATED COST: \$16,200

DEFICIENCY DESCRIPTION: Aged duplex sump pump system.

PHOTOGRAPHIC DOCUMENTATION: No photo available. This equipment is located in the building crawl space at the southwest part of the building and was inaccessible during the walk through.

SUGGESTED SOLUTION :

Due to age it is recommended to replace existing duplex sump pump (DP-4), controls and basin cover.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Duplex Sump Pump (DP- 5)

DEFICIENCY NUMBER: P-6

ESTIMATED COST: \$16,200

DEFICIENCY DESCRIPTION: Aged duplex sump pump system

PHOTOGRAPHIC DOCUMENTATION :



Duplex Sump Pump (DP-5) located in basement room 055

SUGGESTED SOLUTION :

Due to age it is recommended to replace existing duplex sump pumps, controls and basin cover.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Duplex Sump Pump (SP- 1 & SP-2)

DEFICIENCY NUMBER: P-7

ESTIMATED COST: \$16,200

DEFICIENCY DESCRIPTION: Aged duplex dewatering pump system.

PHOTOGRAPHIC DOCUMENTATION :



Duplex Dewatering Pump (SP-1 & SP-2) located in basement room 056

SUGGESTED SOLUTION :

Due to age it is recommended to replace existing duplex dewatering pumps, controls and basin cover.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Showers and Lavatories

DEFICIENCY NUMBER: P-8

ESTIMATED COST: \$7,500

DEFICIENCY DESCRIPTION: Missing/aged showerheads and lavatory faucets.

PHOTOGRAPHIC DOCUMENTATION :



Missing Shower Head in room 062



Typical Restroom lavatories

SUGGESTED SOLUTION : Replace all existing shower heads with new low flow type head. Replace all lavatory faucets with sensor operate. Replace all lavatory faucet aerators with low flow type aerators.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Water Heater (DWH-1 & DWH 2)

LOCATION : Basement

ROOMS SERVED : Entire building

EQUIPMENT CONDITION CODE: GREEN

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Lochinvar/CFN501PM

AGE (YRS) : 5

TYP. USEFUL LIFE (YRS) : 30

FUEL : Natural Gas

INPUT (MBH) : 500

RECOVERY (GPH) : 515
MAX.

WORKING PRESS (PSI) : 160

BURNER TYPE : Radial

VOLTAGE : 120V, single phase

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Duplex Dewatering Sump Pump (SP-1 & SP-2)

LOCATION : Basement level, at the bottom of stair 064

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE:

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Weil/250312

SERIAL NUMBER : N/A

AGE (YRS) : 20

TYP. USEFUL LIFE (YRS) : 25

FLOW (GPM) : 150

PRESSURE (TDH HD) : 50

POWER (HP) : 5

CONTROLS : Duplex, alternating control panel

:

REMARKS :

The operational status of this equipment was not verified.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Domestic Hot Water Storage Tanks 1 & 2

LOCATION : Basement Plumbing Room 056

ROOMS SERVED : Entire building

EQUIPMENT CONDITION CODE: GREEN

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Lochinvar

MODEL NUMBER : RGA0257

AGE (YRS) : 5

TYP. USEFUL LIFE (YRS) : 35 - 50

CAPACITY : 257

TYPE : Vertical Glass lined

SIZE : 91"X34"

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Sewage Ejector Pump

LOCATION : Basement

ROOMS SERVED : Entire building

EQUIPMENT CONDITION CODE: Yellow

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER :

SERIAL NUMBER :

AGE (YRS) :

TYP. USEFUL LIFE (YRS) :

CASING :

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS :

REMARKS :

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Duplex Sump Pump (DP-1)

LOCATION : Basement level, below stair 064

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: YELLOW

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available – pump under water in sump pit

SERIAL NUMBER : Not available – pump under water in sump pit

AGE (YRS) : 20

TYP. USEFUL LIFE (YRS) : 25

FLOW (GPM) : 150

PRESSURE (TDH HD) : 75

POWER (HP) : 5

CONTROLS : Duplex, alternating control panel

:

REMARKS: Although the subject appeared to be in working condition, the operational status of this equipment was not verified.

EQUIPMENT CONDITION INVENTORY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

TYPE OF EQUIPMENT : Duplex Sump Pump (DP-2)

LOCATION : Basement, East Corridor

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: YELLOW

RED: Poor condition. Severe deterioration. **YELLOW**: Marginal condition. Moderate deterioration. **GREEN**: Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available – pump under water in sump pit

SERIAL NUMBER : Not available – pump under water in sump pit

AGE (YRS) : 20

TYP. USEFUL LIFE (YRS) : 25

FLOW (GPM) : 75

PRESSURE (TDH HD) : 60

POWER (HP) : 3

CONTROLS : Duplex, alternating control panel

:

REMARKS: Although the subject appeared to be in working condition, the operational status of this equipment was not verified.

EQUIPMENT CONDITION INVENTORY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

TYPE OF EQUIPMENT : Duplex Sump Pump (DP-3)

LOCATION : Basement level, at the bottom of stair 053

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: YELLOW

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available – pump under water in sump pit

SERIAL NUMBER : Not available – pump under water in sump pit

AGE (YRS) : 20

TYP. USEFUL LIFE (YRS) : 25

FLOW (GPM) : 75

PRESSURE (TDH HD) : 60

POWER (HP) : 3

CONTROLS : Duplex, alternating control panel

:

REMARKS: Although the subject appeared to be in working condition, the operational status of this equipment was not verified.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Duplex Sump Pump, DP-4

LOCATION : Crawl space, south west side of build

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: YELLOW

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available

SERIAL NUMBER : Not available

AGE (YRS) : 20

TYP. USEFUL LIFE (YRS) : 25

FLOW (GPM) : 50

PRESSURE (TDH HD) : 60

POWER (HP) : 2

CONTROLS : Duplex, alternating control panel

:

REMARKS:

EQUIPMENT CONDITION INVENTORY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

TYPE OF EQUIPMENT : Duplex Sump Pump, DP-5

LOCATION : Basement level room 055

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: YELLOW

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available

SERIAL NUMBER : Not available

AGE (YRS) : 20

TYP. USEFUL LIFE (YRS) : 25

FLOW (GPM) : 50

PRESSURE (TDH HD) : 60

POWER (HP) : 2

CONTROLS : Duplex, alternating control panel

:

REMARKS:

EQUIPMENT CONDITION INVENTORY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

TYPE OF EQUIPMENT : Valves

LOCATION : Basement

ROOMS SERVED : Entire building

EQUIPMENT CONDITION CODE:

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER :

SERIAL NUMBER :

AGE (YRS) :

TYP. USEFUL LIFE (YRS) :

CASING :

GAS HEATING :

COOLING COIL :

FILTER :

CONTROLS :

REMARKS :

9. FIRE PROTECTION/SUPPRESSION

9. FIRE PROTECTION/SUPPRESSION

a. Site Supply

The fire suppression system is fed with an 8" incoming feed from the street. There is currently no backflow preventer in the building. A main system control valve, check valve and flow switch are located in the basement level room 056.

b. Hose Valves / Standpipes

The building is provided with a standpipe system with hose valves located throughout, in compliance with current codes. Stairwells three and four, behind the stage, each have a hose valve at the highest landing as well as on the landing adjacent to the stage. Stairwell three has a hose valve just outside of the stairs in the basement. Stairwell four has a third hose valve in the basement. Stairwell one and two, the two means of egress from the bottom of the balcony, both have hose valves at the top of their stairs. The stairs at the top of the balcony, protruding down to the mezzanine level have hose valves at the top of the stairs. The pressure gauges at the presumed hydraulically most remote area, top of the stairs behind the balcony, register about 51 and 52 psi respectively.

c. Sprinklers

The entire building is protected by an automatic sprinkler system with concealed pendant, recessed pendant, standard upright and sidewall sprinklers. A spare sprinkler cabinet is provided in basement level room 056.

d. Smoke Control

The roof above the stage is provided with vents to expel smoke in the case of a fire. There are two release ropes on each side of the stage provided for manual operation of the stage smoke vents. The stage roof smoke control system cannot be verified as working. Full testing of the roof vents as well as their connections to the fire alarm system is required.

A system to prevent the smoke level from falling more than 6 feet above the highest seat is required per NFPA codes. It is unclear whether the roof vents above the stage will provide adequate smoke control for the whole theater. A possible solution is to utilize the existing Air Handling Unit with connection to the building fire alarm system for smoke exhaust set to purge so as maintain an acceptable smoke height.

Observations/Comments:

1. No backflow prevention equipment was observed for the incoming fire service
2. No detector check valve was observed on the incoming fire service.
3. Pressure gauges at the top of the standpipe indicate pressures well below what is required in accordance with NFPA standards. This may be acceptable, provided approved by the AHJ. An NFPA 14 approved fire pump may be required to provide the NFPA required pressure and flow and the top of the standpipes.
4. Several sprinklers are missing cover plates or have been painted.
5. Smoke vents provided in the roof assembly of the stage do not appear to have manual operation as the manual release ropes were observed to be slack.
6. No hose valves are provided in the stage area, although hose valves are provided backstage in the egress stairs.
7. The current zone alarming of the sprinkler system provides multiple flow switch operation with unnecessary flow alarm switches or switches in the wrong location that could result in confusion for emergency responders.
8. Spare sprinklers provided in the spare cabinet falls short of that required by NFPA standards.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Missing Backflow Preventer and Detector Check Valve

DEFICIENCY NUMBER: FP-1

ESTIMATED COST: \$39,500
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Currently the incoming fire service does not connect to a double check backflow preventer or a detector check valve.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

Install backflow preventer and detector check valve.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Stage Roof Vents**DEFICIENCY NUMBER: FP-2****ESTIMATED COST: \$124,200**
SEE APPENDIX B**DEFICIENCY DESCRIPTION:**

Unable to determine if the roof vents above the stage are in working condition. Unable to tell if they are connected to heat detectors and Fire Alarm Control Panel. Unable to determine if manual release is in working condition.

PHOTOGRAPHIC DOCUMENTATION :

SUGGESTED SOLUTION :

Perform tests to determine if existing roof vents are in acceptable condition. Determine if vent openings are tied to heat detectors and Fire Alarm Control Panel. Determine if roof vents can be manually opened with existing release ropes. Repair all release mechanisms and controls determined to be inadequate.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Missing/Unverified Smoke Control

DEFICIENCY NUMBER: FP-3

ESTIMATED COST: \$191,100
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Unable to determine if smoke level will stay 6' above highest seat or if more ventilation will be required.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

Determine if RTU-1 can and needs to be programmed to a purge setting and could be used for further smoke control solutions. Provide new RTU with a purge setting to ensure adequate height of potential smoke layers.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Spare Sprinklers Cabinet

DEFICIENCY NUMBER: FP-4

ESTIMATED COST: \$1,900
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

The current stock of spare sprinklers is inadequate. List of current installed sprinklers is missing from inside cabinet.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

Replace stock of spare sprinklers with an adequate amount and make sure they match the existing installed sprinklers. Provide sprinklers for each kind of sprinkler currently installed and include a detailed list of the types.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Missing Sprinkler Head Cover Plates

DEFICIENCY NUMBER: FP-5

ESTIMATED COST: \$5,700
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Multiple sprinkler heads are missing their covers.

PHOTOGRAPHIC DOCUMENTATION :



SUGGESTED SOLUTION :

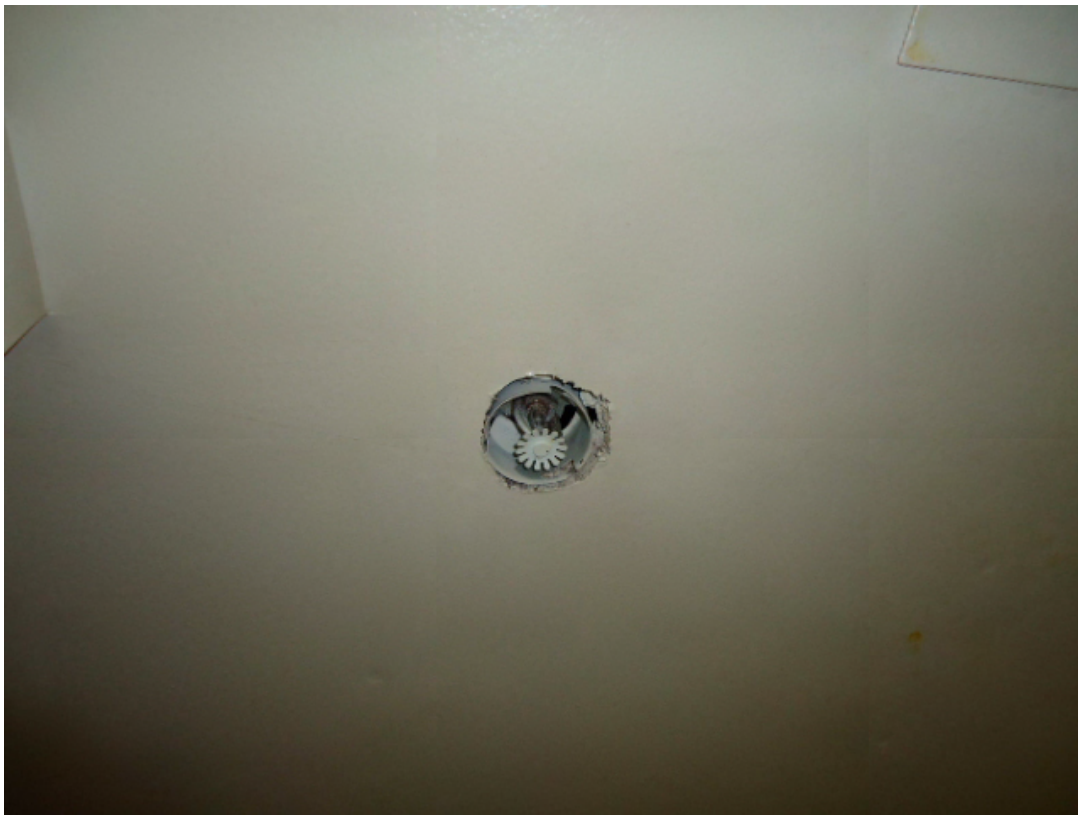
Replace sprinkler head cover plates in kind.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Painted Sprinkler Heads**DEFICIENCY NUMBER: FP-6****ESTIMATED COST: \$3,800**
SEE APPENDIX B**DEFICIENCY DESCRIPTION:**

Multiple sprinkler heads have been painted over.

PHOTOGRAPHIC DOCUMENTATION :

SUGGESTED SOLUTION :

Replace painted sprinkler heads in kind.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Control Valves

LOCATION : Entire Building

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available

SERIAL NUMBER : Not Available

AGE (YRS) : 20 years (1992)

TYP. USEFUL LIFE (YRS) : 40 years

QUANTITY : 15

REMARKS :

Control valves appear to be in good condition. Further testing in compliance with NFPA standards needs to be performed to verify operating conditions.

EQUIPMENT CONDITION INVENTORY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

TYPE OF EQUIPMENT : Flow Alarm Switches

LOCATION : Entire Building

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available

SERIAL NUMBER : Not Available

AGE (YRS) : 20 years (1992)

TYP. USEFUL LIFE (YRS) : 50 years

QUANTITY : 15

REMARKS :

Flow alarm switches appear to be in good condition. Further testing in compliance with NFPA standards needs to be performed to verify operating conditions.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Hose Valves

LOCATION : Entire Building

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available

SERIAL NUMBER : Not Available

AGE (YRS) : 20 years (1992)

TYP. USEFUL LIFE (YRS) : 50 years

QUANTITY : 10

REMARKS :

2½" Hose valves appear to be in good condition. Further testing in compliance with NFPA standards needs to be performed to verify operating conditions.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Inspectors Test Connections

LOCATION : Entire Building

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available

SERIAL NUMBER : Not Available

AGE (YRS) : 20 years (1992)

TYP. USEFUL LIFE (YRS) : 30 years

REMARKS :

Inspectors test connections appear to be in good condition. Further testing in compliance with NFPA standards needs to be performed to verify operating conditions.

EQUIPMENT CONDITION INVENTORY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Pipes

LOCATION : Entire Building

ROOMS SERVED : Entire Building

EQUIPMENT CONDITION CODE: Green

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

MAKE/MODEL NUMBER : Not Available

SERIAL NUMBER : Not Available

AGE (YRS) : 20 years (1992)

TYP. USEFUL LIFE (YRS) : 40 years

REMARKS :

Pipes appear to be in good condition. Further testing in compliance with NFPA standards needs to be performed to verify operating conditions.

10. ELECTRICAL

10. ELECTRICAL

a. Power

The power distribution system for the facility is in good shape and has been periodically maintained by Kolb Electric. The last date and scope of the preventative maintenance is unknown. The last known date of preventative maintenance is 4/5/04. There were minor code violations throughout the electrical infrastructure that are noted in the electrical deficiencies. Specific items and observations are noted in the following text.

Observations/Comments:

1. Main Switchboard

The power distribution system consists of a 4000 amp, 120/208V switchboard with 7 sections. The main switchboard is manufactured by General Electric. The main disconnect is fed from a Pepco transformer via a pull section. The distribution sections are comprised of individual fused switches. Some functions of the metering do not work.

2. Distribution and Branch Circuit Panels

The distribution and branch circuit panel boards are surface mounted with bolt-on, molded case circuit breakers. The system is in good overall condition. All panel schedules need to be updated. All tape markers need to be replaced with labels. All tape used for lock on/off devices need to be replaced with handle locks and all tape used for breaker space covers need to be replaced with space covers.

3. Stage Power

Stage power is provided via four disconnect switches located around the stage. Two of the disconnect switches are 200A. Two of the disconnect switches are 400A.

4. Wiring Methods

The wiring method used throughout the Theatre is conduit and wire. A few instances of metal clad (MC) cable have been noted. The systems appear to be code compliant with minimal repair or replacements needed. Several junction and pull boxes have unsecured or missing covers exposing the wiring inside. The covers need to be secured or replaced. Several appliance cords and extension cords are located in public areas and taped to the floors. This is a major tripping hazard. The cords need to be removed and outlet added where necessary for plug loads.

5. Power Quality

A voltage fluctuation problem has been reported by the Theatre staff. The voltage fluctuation could be caused by an internal load inrush caused by equipment starting or it could be caused by voltage fluctuations from the utility department. Incandescent lamps, due to their nature, are very susceptible to voltage fluctuations and can have noticeable dimming and brightening. An incandescent light fixture will have an approximate 20% reduction in brightness with a 5% reduction in voltage. Typical utility requirements for voltage are +/- 10% of the nominal voltage.

b. Lighting

The lighting system is comprised of a mixture of incandescent and fluorescent fixtures. The system has not been maintained and a number of fixtures are equipped with burned out lamps and/or ballasts.

Observations/Comments:

1. Fluorescent Fixtures

Most fluorescent fixtures are not energy efficient and have T12 lamping. The system is in overall good condition with a few burned out lamps and/or ballasts that need to be replaced.

2. Incandescent Fixtures

Several of the historic fixtures in the public spaces have burned out bulbs. Due to the difficulty in accessing the fixtures, a group re-lamping should be done using long-life incandescent lamps or if an acceptable LED replacement lamp can be utilized. The LED replacement option will need to be closely coordinated with the dimming system.

3. Emergency/Exit Lighting

Wall mounted emergency lighting is provided throughout the spaces. The wall mounted emergency lighting does not appear to provide adequate lighting throughout the seating areas and aisles. The exits appear to be adequately marked. The system should be tested and exit paths measured for the required illumination and battery output. The life safety lighting systems should illuminate for a minimum of 90 minutes on battery. Another solution would be to provide an inverter system on the standard building system lighting fixtures. This would allow the historic fixtures to become emergency lighting fixtures without changing or altering the fixtures.

4. Stage Lighting and Controls

The stage lighting control system is fairly new and was not included in our conditions report.

c. Telephone/Data

The telephone data system is functioning and is made up of several different types of cables. In several places abandoned cables have been left in place and new cables are not properly supported. All abandoned cabling should be removed in its entirety per code. All unsupported or improperly supported cables should be bundled and supported using proper EIA/TIA methods.

d. Fire Alarm and Notification

The fire alarm system provides activation and notification throughout the facility. The fire alarm system appears to be functioning properly and has been periodically maintained.

Observations/Comments:

1. Fire Alarm Control Panel

The fire alarm control panel (FACP) is manufactured by Simplex and is located in the main electrical room. The FACP appears to be functioning and has been maintained and tested by Tyco/Simplex periodically.

2. Activation and Notification System

The fire alarm system is activated by a system of ceiling mounted smoke detectors, duct mounted smoke detectors and manual pull stations. Manual pull stations are located at the exits and the smoke detectors are located in various locations. The notification system is comprised of bells and strobes. The coverage appears to be adequate for the requirements at the time of installation, but do not meet current requirements. Current codes would require audio signaling for an assembly area of this capacity to have voice capability. The strobes would be required to have clear xenon strobes of differing candela to provide complete coverage. The fire alarm system should be completely tested and all audible and visual alarms measured for coverage compliance. The areas lacking coverage should be provided with additional notification devices. Per code the stage audio should be disconnected during an alarm. We were unable to determine if this functionality is provided. The system should be tested for this capability.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Voltage Fluctuations**DEFICIENCY NUMBER: E-1****ESTIMATED COST: \$80,700**
SEE APPENDIX B**DEFICIENCY DESCRIPTION:**

A voltage fluctuation problem has been reported by the theater staff. The voltage fluctuation could be caused by an internal load inrush caused by equipment starting or it could be caused by voltage fluctuations from the utility department.

Working with the same premise as a dimmer switch, as the voltage is reduced so is the light (lumen) output of the lamp. Incandescent lamps, due to their nature, are very susceptible to voltage fluctuations and can have noticeable dimming and brightening. An incandescent light fixture will have an approximate 20% reduction in brightness with a 5% reduction in voltage. Typical utility requirements for voltage are +/- 10% of the nominal voltage. A small reduction in voltage will have a significant visual impact on the lumen output of the incandescent lighting.

PHOTOGRAPHIC DOCUMENTATION :



Main switchboard showing incoming section, main section and distribution sections.

Each section will require voltage and current metering during an event. The documentation from the metering will be analyzed to determine probable cause of the voltage fluctuations. The solution would be isolate the problematic circuit or provide a power conditioning system that will provide a regulated voltage regardless of external forces.



Typical incandescent lighting found throughout the facility.

Incandescent lighting is extremely susceptible to voltage fluctuations.

SUGGESTED SOLUTION :

Determining the source of the voltage fluctuations will be the key in determining a solution. Metering of voltage and current will be required over a period of time on the main feeder and branch distribution circuits. The voltage fluctuations can then be compared for each circuit at a known time for an occurrence of unwanted dimming. If the cause of the voltage fluctuations is internal to the building, the suspect circuit can be reconfigured to minimize the impact to the lighting circuits; however this may not completely fix the problem. If the cause is found to be utility supply problems (but still within the $\pm 10\%$), the only solution would be to provide a power conditioning system to guarantee a regulated voltage. A power conditioning system is the only solution to ensure regulated voltage for either instance.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Unsecured J-boxes

DEFICIENCY NUMBER: E-2

ESTIMATED COST: \$2,300
SEE APPENDIX B

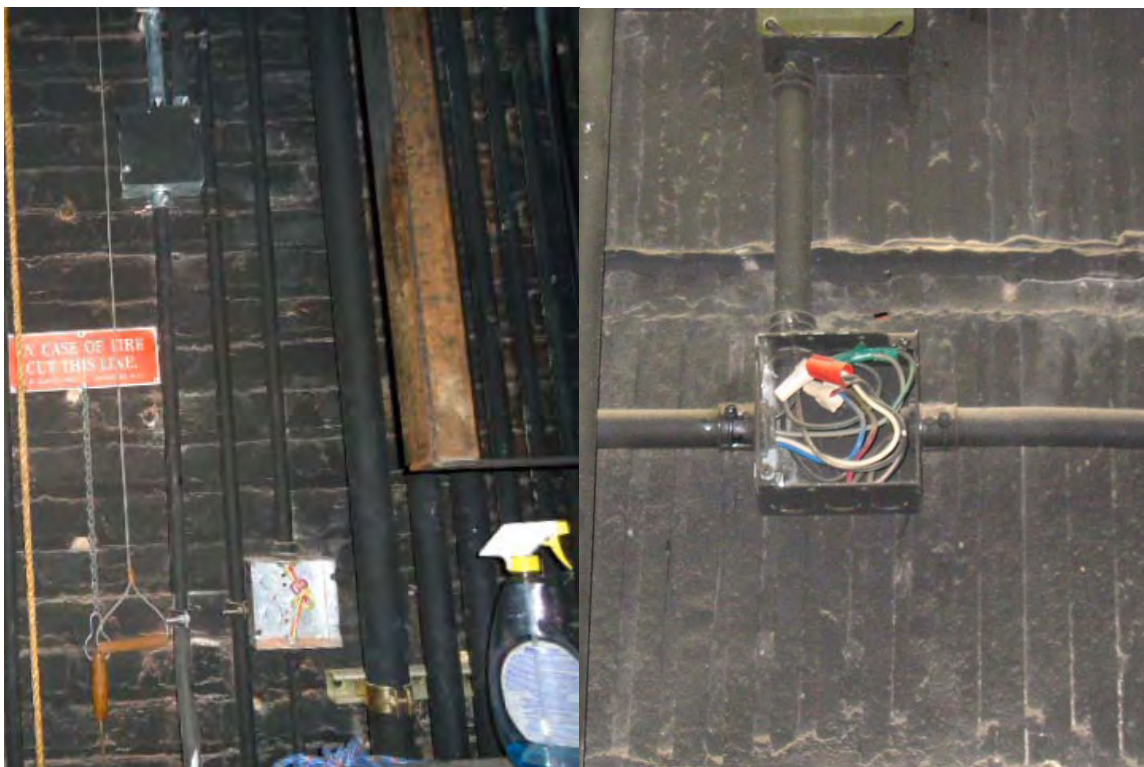
DEFICIENCY DESCRIPTION:

Several junction and pull boxes were noted without covers or with covers ajar. These open junction boxes allow for unprotected cables and junctions. This is a violation of the National Electrical Code.

PHOTOGRAPHIC DOCUMENTATION :



Open or unsecured junction boxes with exposed wiring.



Open or unsecured junction boxes with exposed wiring.



Open or unsecured junction boxes with exposed wiring.

SUGGESTED SOLUTION :

Provide install covers for junction and pull boxes where missing. Secure all j-box covers where existing, but not secure.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Drop Cords and Extension Cords Taped to Floor

DEFICIENCY NUMBER: E-3

ESTIMATED COST: \$10,600
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Several drop cords, extension cords and power cords have been plugged into outlets and either taped to the floor or laying free on the floors in public space. This is a significant tripping hazard and is a violation of the National Electrical Code.

PHOTOGRAPHIC DOCUMENTATION :



Appliance cord routed along floor in public area.



Appliance cord routed along floor in public area.



Appliance cord routed along floor in public area.



Appliance cord routed along floor in public area.

SUGGESTED SOLUTION :

Add receptacles for miscellaneous loads where needed to eliminate the necessity for cords running along public areas.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Burned Out Lamps and/or Ballasts

DEFICIENCY NUMBER: E-4

ESTIMATED COST:\$11,000
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Several lamps and/or ballasts are burned out and are in need of replacing.

PHOTOGRAPHIC DOCUMENTATION :



Historic lighting fixtures showing burned out lamps.

SUGGESTED SOLUTION :

Replace all burned out ballasts and/or lamps. Group lamping should be done for the seating areas due to access issues. Determine if an LED lamp replacement is acceptable to use long life lamps. Close coordinate will be required between the new lamps and existing dimming systems.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Emergency Lighting Levels**DEFICIENCY NUMBER: E-5****ESTIMATED COST: \$68,700**
SEE APPENDIX B**DEFICIENCY DESCRIPTION:**

The emergency lighting levels for the public spaces does not appear to be sufficient.

PHOTOGRAPHIC DOCUMENTATION :

Typical emergency and exit light configuration.

SUGGESTED SOLUTION :

Perform a simulated power outage by turning off all breakers that supply emergency lighting fixtures. Measure and record lighting levels along the egress paths. New lighting levels should be calculated to provide the required minimum lighting levels during emergency conditions. Provide additional emergency aisle lighting from the seats adjacent to the aisle ways. An alternate resolution is to provide an inverter system for the standard building lighting system.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Abandoned Telephone/Data Cabling and Unsupported Cables

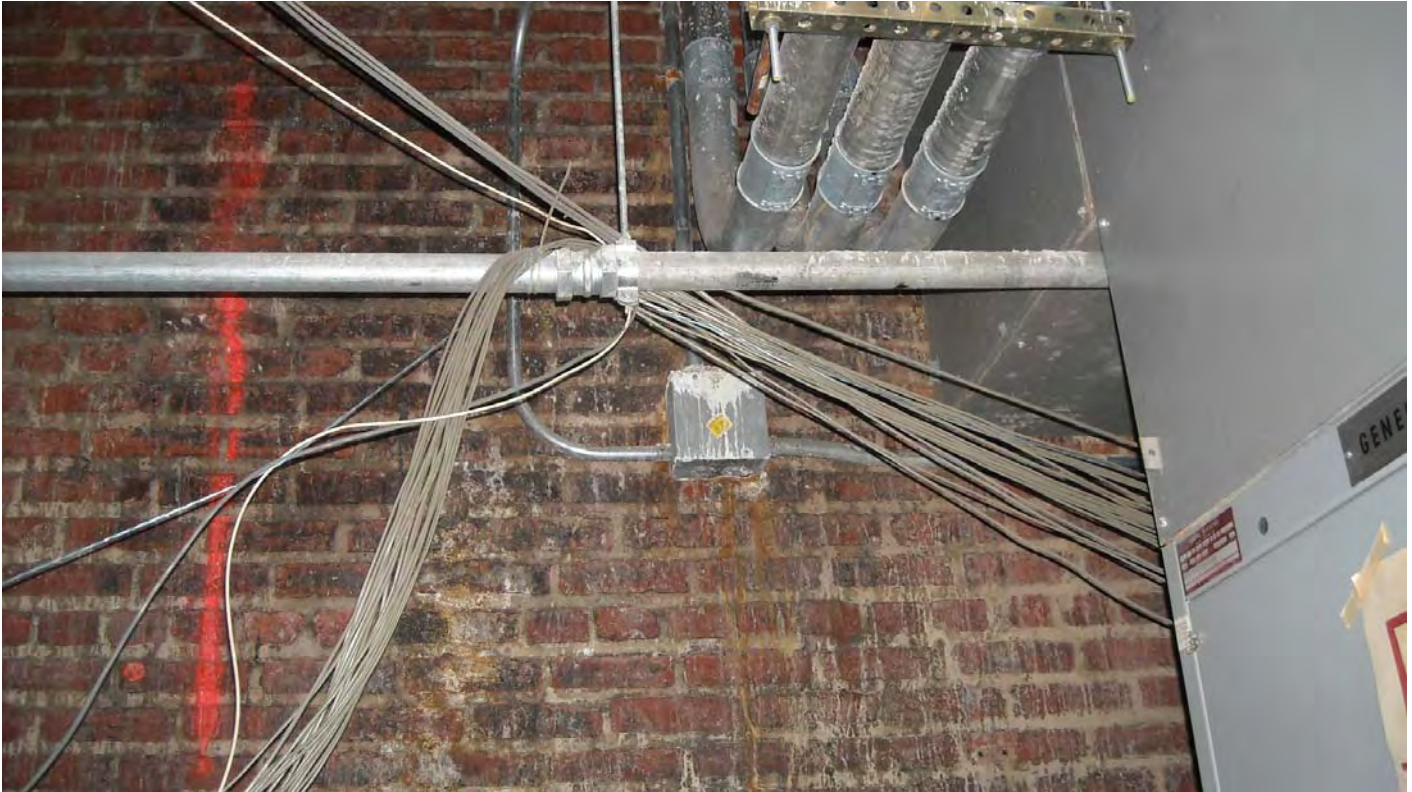
DEFICIENCY NUMBER: E-6

ESTIMATED COST: \$ 11,100
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Throughout the facility telephone and data cabling has been abandoned and left in place. All abandoned cabling should be completely disconnected and removed per NEC requirements. All improperly supported cables shall be properly supported per EIA/TIA standards. Fire stop shall be provided in all rated partitions.

PHOTOGRAPHIC DOCUMENTATION :



Improperly supported cables.



Improperly supported cables.



Improperly supported cables with no fire stop.



Improperly supported cables.



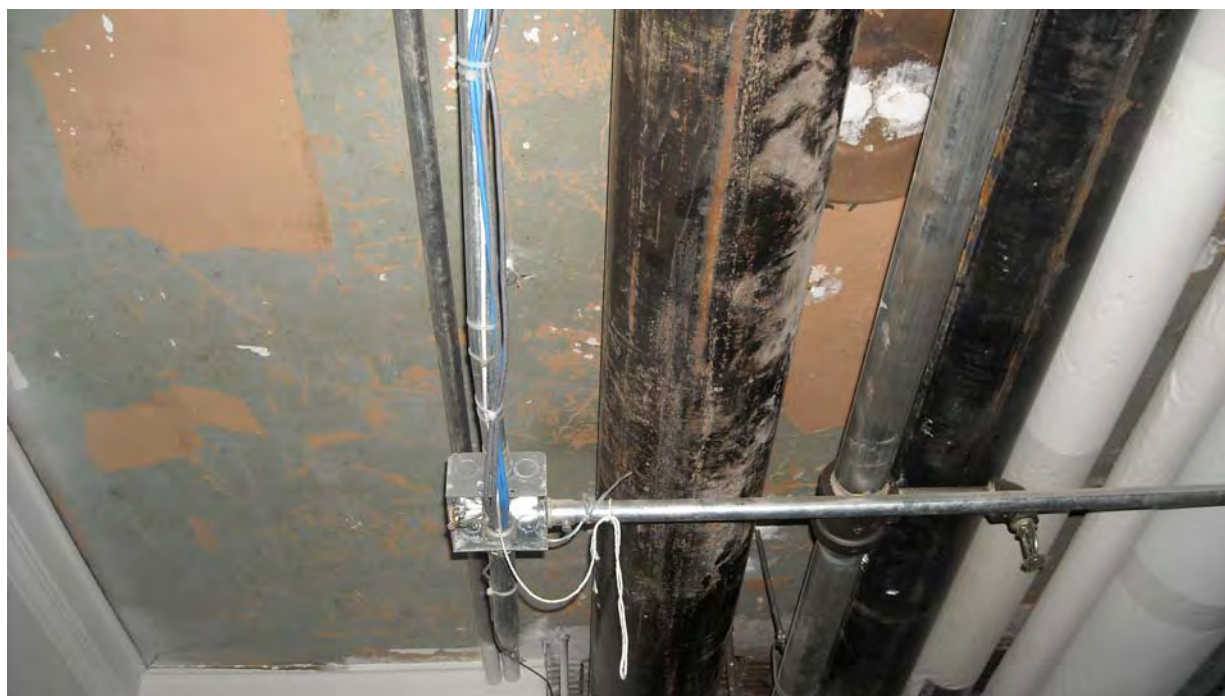
Improperly supported cables. Grommets not provided for protection.



Improperly supported cables.



Abandoned cables or unused cables not properly supported.



Improperly supported cables. Pull box cover is missing.



Improperly supported cables. Insufficient fire stop.

SUGGESTED SOLUTION :

Disconnect and completely remove all abandoned telecom cables. Bundle and support all cables per EIA/TIA standards. Provide fire stop in all rated partitions.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Fire Alarm Audio and Visual Coverage**DEFICIENCY NUMBER: E-7****ESTIMATED COST: \$76,500**
SEE APPENDIX B**DEFICIENCY DESCRIPTION:**

The facility is protected by an automatic and manual fire alarm system. The coverage does not appear to meet current standards.

PHOTOGRAPHIC DOCUMENTATION :

Typical fire alarm devices. Bell/strobe and manual pull station at the balcony exit.



Typical fire alarm devices. Bell/strobe.

SUGGESTED SOLUTION :

Measure all alarm audible and visual levels. Provide additional devices as required for the required coverage. Verify sound system override and provide if capability is missing.

DEFICIENCY

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

DEFICIENCY TITLE: Minor Electrical Repairs

DEFICIENCY NUMBER: E-8

ESTIMATED COST: \$20,500
SEE APPENDIX B

DEFICIENCY DESCRIPTION:

Minor electrical repairs include providing up to date panel schedules, labels, removing tape, providing space covers and providing lock on/off devices.

PHOTOGRAPHIC DOCUMENTATION :

Typical panels. Provide updated labels, panel schedules. Remove tape and provide space covers.



Typical Panels. Remove tape and provide handle lock-on devices.

SUGGESTED SOLUTION :

Provide updated panel schedules, labels and remove all tape. Provide handle lock on/off devices.

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Two (2) 400A Disconnect Switches

LOCATION : 1st Floor Stage

MANUFACTURER : Siemens ITE

SERVED BY FEEDER : MSB

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 7 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :



Stage power disconnect switches.

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : 60A Sump Pump Disconnect Switch

LOCATION : Basement Electrical Room

MANUFACTURER : Siemens ITE

SERVED BY FEEDER : Wireway

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 7 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : 60A Sewage Pump Disconnect Switch

LOCATION : Basement Electrical Room

MANUFACTURER : Siemens ITE

SERVED BY FEEDER : Wireway

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 7 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : 400A Future Emergency Disconnect Switch

LOCATION : Basement Electrical Room

MANUFACTURER : Siemens ITE

SERVED BY FEEDER : Wireway

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 7 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : 400A Emergency Disconnect Switch

LOCATION : Basement Electrical Room

MANUFACTURER : Siemens ITE

SERVED BY FEEDER : Wireway

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 7 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : 100A Emergency Disconnect Switch

LOCATION : Basement Electrical Room

MANUFACTURER : Siemens ITE

SERVED BY FEEDER : Wireway

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 7 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Two (2) 200A Disconnect Switches

LOCATION : 1st Floor Stage

MANUFACTURER : Siemens ITE

SERVED BY FEEDER :

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 7 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :



Stage Power Disconnect (Typical of 2)

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Panelboard 'PN1'

LOCATION : 1st Floor Stage

MANUFACTURER : GE 'A' Series

SERVED BY FEEDER : MSB

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 20 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

3P-100A MCB
7 spaces / 3 blanks



Panel PN1 located on stage.

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Panelboard 'LP1'

LOCATION : Northwest Exit

MANUFACTURER : GE 'A' Series

SERVED BY FEEDER : MSB

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 20 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

3P-125A MCB
14 spaces



Panel LP1 in dressing room corridor.

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Panelboard 'LP2'

LOCATION : West of South Entrance

MANUFACTURER : GE 'A' Series

SERVED BY FEEDER : 20 years

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 50 years

TYPICAL USEFUL LIFE (YRS) :

REMARKS :



Panel LP2 in front office area.

EQUIPMENT CONDITION INVENTORY
BUILDING ASSESSMENT
D.C. DEPARTMENT OF GENERAL SERVICES
LINCOLN THEATRE 1215 U STREET, N.W. WASHINGTON, DC PO388329
TYPE OF EQUIPMENT : Panelboard 'PS1'
LOCATION : 1 st Floor Sound and Lighting Room
MANUFACTURER : GE 'A' Series
SERVED BY FEEDER : MSB
EQUIPMENT CONDITION CODE <small>RED: Poor condition. Severe deterioration. YELLOW: Marginal condition. Moderate deterioration. GREEN: Acceptable condition. Limited deterioration.</small>
CODE : Green
AGE (YRS) : 20 years
TYPICAL USEFUL LIFE (YRS) : 50 years
REMARKS : 225A M.L.O. 10 Spaces

EQUIPMENT CONDITION INVENTORY
BUILDING ASSESSMENT
D.C. DEPARTMENT OF GENERAL SERVICES
LINCOLN THEATRE 1215 U STREET, N.W. WASHINGTON, DC PO388329
TYPE OF EQUIPMENT : Panelboard '1P'
LOCATION : 1 st Floor Sound and Lighting Room
MANUFACTURER : GE 'A' Series
SERVED BY FEEDER : MSB
EQUIPMENT CONDITION CODE <small>RED: Poor condition. Severe deterioration. YELLOW: Marginal condition. Moderate deterioration. GREEN: Acceptable condition. Limited deterioration.</small>
CODE : Green
AGE (YRS) : 20 years
TYPICAL USEFUL LIFE (YRS) : 50 years
REMARKS : 3P – 100A MCB 13 Spaces

EQUIPMENT CONDITION INVENTORY
BUILDING ASSESSMENT
D.C. DEPARTMENT OF GENERAL SERVICES
LINCOLN THEATRE 1215 U STREET, N.W. WASHINGTON, DC PO388329
TYPE OF EQUIPMENT : Panelboard 'PS2'
LOCATION : 2 nd Floor Projector Room
MANUFACTURER : GE 'A' Series
SERVED BY FEEDER : MSB
EQUIPMENT CONDITION CODE <small>RED: Poor condition. Severe deterioration. YELLOW: Marginal condition. Moderate deterioration. GREEN: Acceptable condition. Limited deterioration.</small>
CODE : Green
AGE (YRS) : 20 years
TYPICAL USEFUL LIFE (YRS) : 50 years
REMARKS : 225A M.L.O. Lock on/off are provided for safety. 6 spaces



Panel PS2 in Projector Room. Lock on devices should be installed to replace tape.

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Emergency Panelboard 'ELP'

LOCATION : Basement Electrical Room

MANUFACTURER : GE 'A' Series

SERVED BY FEEDER :

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 20 years

TYPICAL USEFUL LIFE (YRS) : 50 years

REMARKS :

Three (3) panel blanks are not provided



Panel ELP in Main Electrical Room
Tape is not a code compliant space cover. Covers shall be provided.

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Fire Alarm Control Panel

LOCATION : Basement Electrical Room

MANUFACTURER : Simplex 4100

SERVED BY FEEDER : Wireway via 30A Plug Fuses

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 15 years

TYPICAL USEFUL LIFE (YRS) : 25 years

REMARKS :

Last inspection 1/31/2012.



FACP Operator Interface Panel



FACP in Main Electrical Room

EQUIPMENT CONDITION INVENTORY
BUILDING ASSESSMENT
D.C. DEPARTMENT OF GENERAL SERVICES
LINCOLN THEATRE 1215 U STREET, N.W. WASHINGTON, DC PO388329
TYPE OF EQUIPMENT : Panelboard 'LPB'
LOCATION : Basement Electrical Room
MANUFACTURER : GE 'A' Series
SERVED BY FEEDER : MSB
EQUIPMENT CONDITION CODE <small>RED: Poor condition. Severe deterioration. YELLOW: Marginal condition. Moderate deterioration. GREEN: Acceptable condition. Limited deterioration.</small>
CODE : Green
AGE (YRS) : 20 years
TYPICAL USEFUL LIFE (YRS) : 50 years
REMARKS : 225 M.L.O. No spares/spaces



Panel LPB in Main Electrical Room

EQUIPMENT CONDITION INVENTORY**BUILDING ASSESSMENT****D.C. DEPARTMENT OF GENERAL SERVICES**

**LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329**

TYPE OF EQUIPMENT : Panelboard 'LPB1'

LOCATION : Basement Electrical Room

MANUFACTURER : Siemens P1

SERVED BY FEEDER : MSB

EQUIPMENT CONDITION CODE

RED: Poor condition. Severe deterioration. **YELLOW:** Marginal condition. Moderate deterioration. **GREEN:** Acceptable condition. Limited deterioration.

CODE : Green

AGE (YRS) : 5 years

TYPICAL USEFUL LIFE (YRS) : 30 years

REMARKS :

250 M.L.O.
30 Spaces



Panel LPB1 in Main Electrical Room

EQUIPMENT CONDITION INVENTORY	
BUILDING ASSESSMENT	
D.C. DEPARTMENT OF GENERAL SERVICES	
LINCOLN THEATRE 1215 U STREET, N.W. WASHINGTON, DC PO388329	
TYPE OF EQUIPMENT	: Relay for Air Handling Unit Shut-Down
LOCATION	: Basement Electrical Room
MANUFACTURER	: Siemens ITE
SERVED BY FEEDER	: Wire way
EQUIPMENT CONDITION CODE <small>RED: Poor condition. Severe deterioration. YELLOW: Marginal condition. Moderate deterioration. GREEN: Acceptable condition. Limited deterioration.</small>	
CODE	: Green
AGE (YRS)	: 7 years
TYPICAL USEFUL LIFE (YRS)	: 30 years
REMARKS :	
	Not properly labeled.

EQUIPMENT CONDITION INVENTORY	
BUILDING ASSESSMENT	
D.C. DEPARTMENT OF GENERAL SERVICES	
LINCOLN THEATRE 1215 U STREET, N.W. WASHINGTON, DC PO388329	
TYPE OF EQUIPMENT	: Main Switchboard
LOCATION	: Basement Electrical Room
IDENTIFICATION NO.	: MSB
MANUFACTURER	: General Electric
NO. OF CUBICLES	: 7 Sections
EQUIPMENT CONDITION CODE <small>RED: Poor condition. Severe deterioration. YELLOW: Marginal condition. Moderate deterioration. GREEN: Acceptable condition. Limited deterioration.</small>	
CODE	: Green
AGE (YRS)	: 20 years
TYPICAL USEFUL LIFE (YRS)	: 50 years
REMARKS : Ammeter not functioning. GE#72298872; Plant # T222 Inspected by Kolb Electric 4/5/04	



Main Switchboard.

From left to right:

Incoming / Main Switch / Distribution / Distribution / Distribution / Distribution / Distribution

11. THEATRICAL SYSTEMS

11. THEATRICAL SYSTEMS

The survey and evaluation of theatric systems are not part of this scope of work, however, several items were identified with users.

a. Buzzing in Sound System

The system should be checked by an audio engineer to eliminate the buzzing. This could be as simple as a “bad ground” in one piece of equipment or a cable, or could be much more involved. See Deficiency T-1.

b. Orchestra Lift Mechanism

The orchestra lift mechanism does not operate smoothly. This should be checked by an authorized service mechanic, regularly engaged in stage lifts. A maintenance protocol also should be established. See Deficiency T-2.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Sound System Buzzing**DEFICIENCY NUMBER:** T-1**ESTIMATED COST:** (N/A)**DEFICIENCY DESCRIPTION:**

Sound system buzzing.

PHOTOGRAPHIC DOCUMENTATION :

No photo

SUGGESTED SOLUTION :

Troubleshoot / repair sound system.

DEFICIENCY

LINCOLN THEATRE
1215 U STREET, N.W.
WASHINGTON, DC
PO388329

DEFICIENCY TITLE: Sticky Orchestra Pit Lift

DEFICIENCY NUMBER: T-2

ESTIMATED COST: (N/A)

DEFICIENCY DESCRIPTION:

Sticky Orchestra Pit lift.

PHOTOGRAPHIC DOCUMENTATION :

No photo

SUGGESTED SOLUTION :

Service motor and mechanism.

12. ENERGY CONSERVATION

12. ENERGY CONSERVATION

a. HVAC Equipment

There is no available information on the control sequences and operating characteristics of the air handling units to develop suggestions at this time. However, upon completion of the suggested commissioning, the potential for savings in utility costs may be exposed.

b. Plumbing

Energy may be conserved through the use of low flow fixtures and sensor operated faucets and flush valves.

c. Other Systems or Materials

Energy can be saved by installing interior storm windows to augment the original single pane windows of the Theatre. Replacement of existing windows is not recommended because of the historic significance of the windows. All exterior doors increase energy conservation by installed new weather-stripping and sweeps. This will mitigate air leakage from the structure. The roofs could not be confirmed that they are insulated. If the roofs are not insulated or partially insulated, it is recommended that insulation of up to R-30 be installed.

IV. UNITS OF MEASUREMENT

IV. UNITS OF MEASUREMENT

The information on areas, sizes, and volumes of this report shall be prepared using English measurements.

V. PROPRIETARY REQUIREMENTS

V. PROPRIETARY REQUIREMENTS

All materials developed as a result of this effort, including software, shall become property of the DGS.

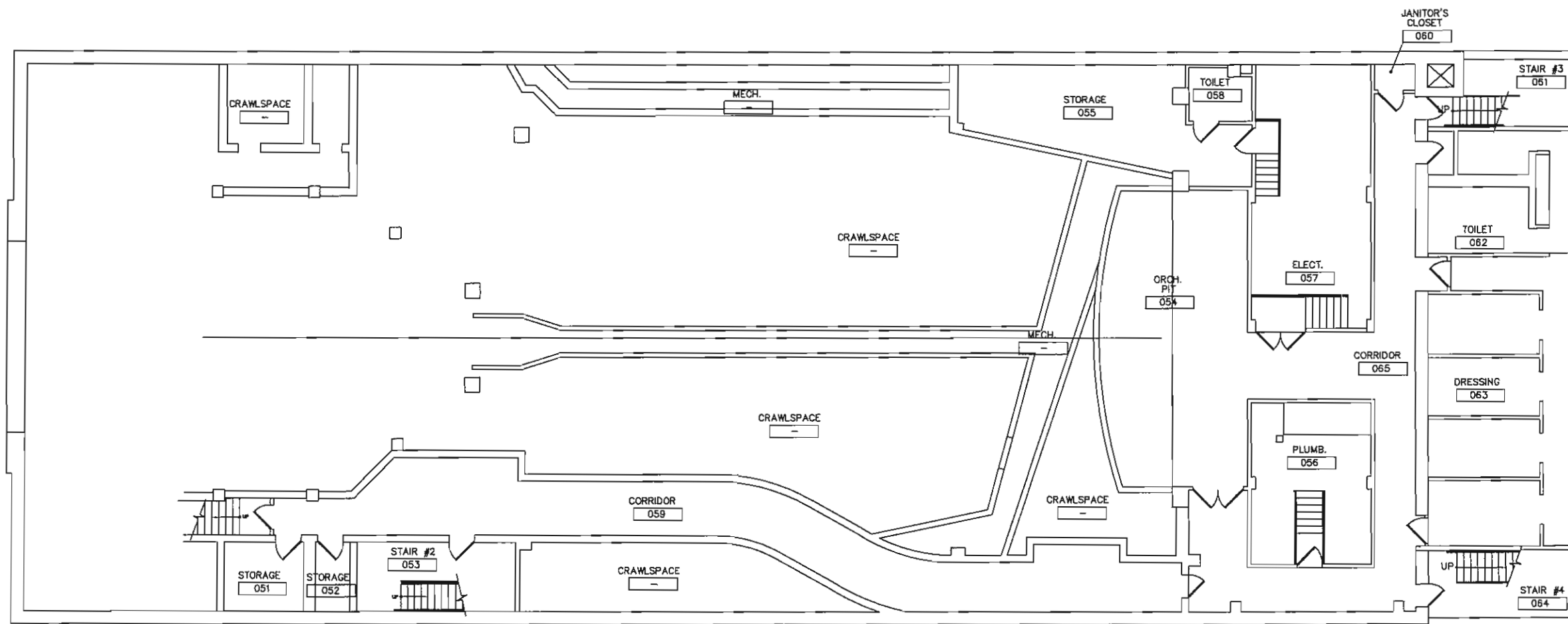
VI. APPENDICES

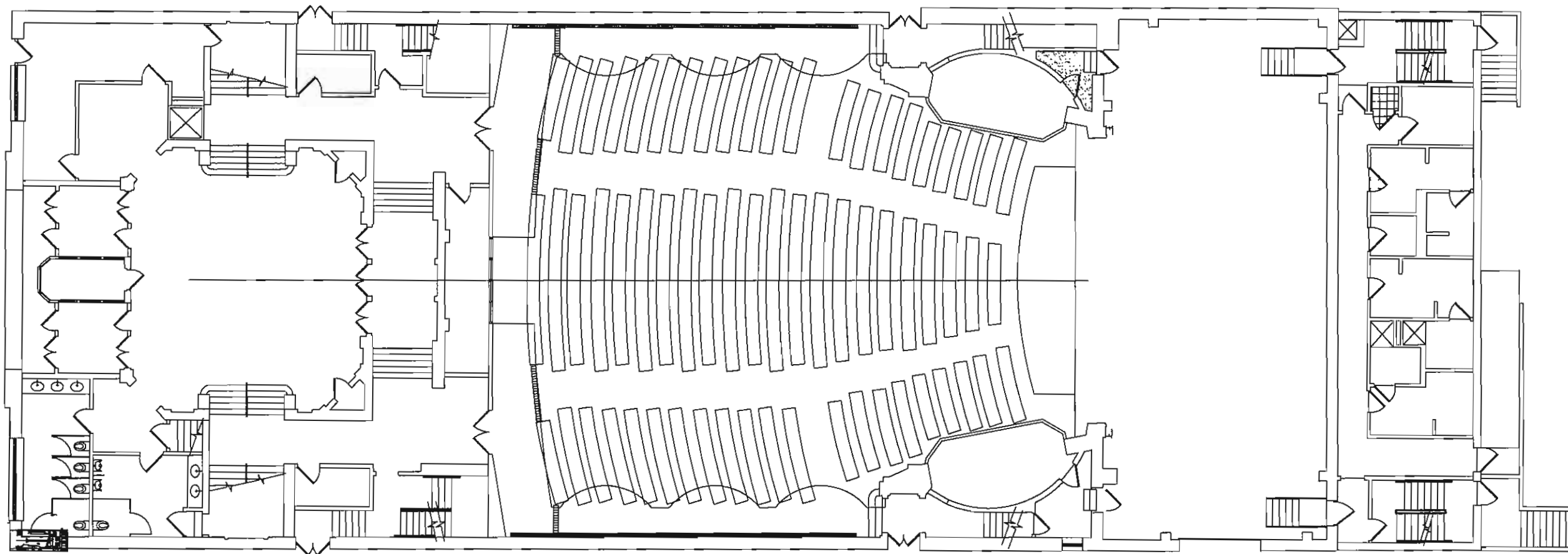
A. APPENDIX A: Floor Plans

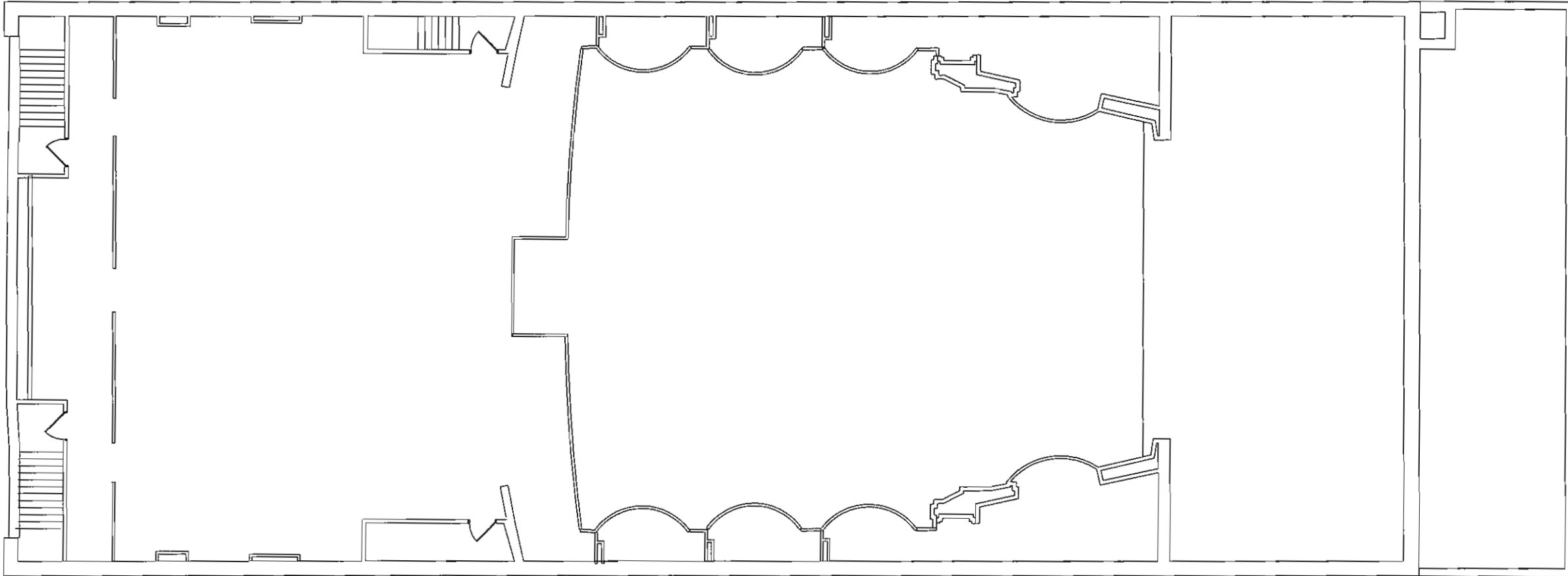
B. APPENDIX B: Preliminary Budget Estimate

C. APPENDIX C: Pre-Survey Questionnaire

A. APPENDIX A: Floor Plans







B. APPENDIX B: Preliminary Budget Estimate

[illegible]

